

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of 20 July 2009 (Office Action). This response is filed after the expiration of the 3-month shortened statutory period and a one month extension is believed to be due. The Examiner is authorized to charge the extension fee and any deficiencies or credit any overpayments to Deposit Account No. 50-3610.

I. 35 U.S.C. § 101 REJECTION

Claims 1-5, 11-15, 16-20 are rejected due to potential issues relating to non-statutory matter.

Applicants note that claimed phrases, such as “billing engine residing on a computing device in said distributed network” make it clear that the claims are tied to a particular machine or apparatus as required by *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008). Thus, the 35 USC 101 rejections are improper (since the claims are tied to a particular machine or apparatus) and should be withdrawn.

Nevertheless, Applicants have amended to claims to ensure no potential 35 USC 101 issues are present in the claims. Specifically, Applicants have noted that various claimed elements are implemented within software stored on a tangible computer readable medium. This is supported by the specification (para. 0012 and claim 6, for example) and is also knowledge possessed (inherent in software implemented Web services) by one of ordinary skill in the art.

Responsive to the above arguments and amendments, Applicants respectfully request the 35 USC 101 rejections be withdrawn.

II. 35 U.S.C. § 112, second paragraph REJECTION

Applicants note as an initial matter, that the terms “first billing functions” and “associated with” have existed in the claims since filing. This is the forth office Action on the instant case and the first time any objection was made to these terms.

A. First billing functions

With regard to “first billing functions” the Examiner has stated that “first billing functions are not defined in the claims or in the specification. Applicants point out the following from MPEP 2173.02:

“a claim term that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible. *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004) (holding that the disputed claim term “surrender value protected investment credits” which was not defined or used in the specification was discernible and hence not indefinite because “the components of the term have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence”).

Further, the term “first billing functions” have a well recognized meaning, which allow a reader to infer the meaning of the claimed phrase with a reasonable confidence.

Nevertheless, in a desire for enhanced clarity of expression, Applicants have amended the claims to change the term “first billing functions” to “billing functions” to avoid any potential uncertainties with this claimed phrase.

The 35 USC 112 rejections to based on the phrase “first billing functions” should be withdrawn, which action is respectfully requested.

B. Associated with

The Examiner states that “associated with” is a relative term, which renders the claim indefinite. Applicants disagree. Applicants have conducted a search in the USPTO database for “associated

with” being contained within claims, which produced 422,000 patents. (*See* cut and pasted results from the search below).

Searching US Patent Collection...

Results of Search in US Patent Collection db for:
ACLM/"associated with": 422000 patents.
Hits 1 through 50 out of 422000

The above indicates that the phrase “associated with” has been determined to be reasonably descriptive for over four hundred thousand issued patents. Looking at the context of the specific usage of the phrase “associated with” in claims 1, 6, 11, and 16, Applicants believe the usages of “associated with” in the claims has a clear and well recognized meaning, which allow a reader to infer the meaning of the claimed phrase with a reasonable confidence.

Applicants further note from MPEP 2173.02:

When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement.

Turning to Applicants’ specific usage of this phrase: Applicants claims include:

each of said application programming interfaces being associated with one of said billing functions and being implemented such that the billing function associated therewith is

performed after a web service invocation that commands performance of said billing function is received by said web service interface.

In context, the term “associated with” has a clear and well recognized meaning, which allow a reader to infer the meaning of the claimed phrase with a reasonable confidence, as required (per MPEP 2173.02). This phrase and meaning are further clarified by para 0042-0087, where specific examples of application programming interfaces that are associated with billing functions are given. One of ordinary skill of the art would understand that the claimed application program interfaces are used as programmatically implemented interfaces to invoke the billing function to which it corresponds.

The 35 USC 112 rejections to claims 1, 6, 11, and 16 based on the phrase “associated with” should be withdrawn, which action is respectfully requested.

III. Claim Amendments

Claim 16 has been modified to emphasize an embodiment of the invention that is a method having the following limitations:

A method for providing a billing service comprising:
 receiving a plurality of Web service invocations for a Web service interface, wherein each Web service invocation commands performance of a billing function, said billing function being performed by a billing engine hosted on a billing system, wherein said Web service invocation is digitally conveyed from a computing application executing on a computing device over a distributed network to the billing system, wherein said computing application provides at least one commercial service made available by a commercial service provider for a usage charge;
 executing the billing function of the billing engine responsive to receiving each Web service invocation, wherein executing of the billing functions for different ones of the Web service invocations comprise actions causing the billing engine to:
 create a billing account for a user of the commercial service;
 delete a billing account for a user of the commercial service;
 create a record of a billing event in a billing account corresponding to a user of the commercial service;

obtain the status of a billing account corresponding to a user of the commercial service; and
obtain an invoice for a billing account corresponding to a user of the commercial service.

Support for this claim amendment is provided by, for example, original claim 3, paras. 0024, 0026, 0036, 0002-0004.

Claim 17 has been grammatically amended to be consistent with claim 16.

No new matter has been added.

IV. 35 U.S.C. § 103(a) REJECTIONS

The Examiner rejected Claims 1, 2, 4, 5, 6, 7, 9, 10, 11, 12, and 14-20 under 35 U.S.C. § 103(a) as being unpatentable over Stelting (2004/0030740) in view of Coffee (EWeek, Beyond the Buzz, Peter Coffee), in view of PR Newswire (Granite Systems and Step 9), in view of 15 Seconds (Building Client interfaces for .Net Web services), in further view of David Orenstein (Quickstudy API).

The Applicants' claims include a limitation for providing a Web service interface for a billing service in a distributed network. The primary reference (Stelting) lacks teachings of providing a billing service as a Web service. None of the other cited references (Coffee, PR Newswire, 15 Seconds, Orenstein) cure the deficiencies of Stelting. That is, none of them provide any teachings for a providing a Web service interface for a billing service in a distributed network, as claimed.

Specifically:

- **Coffee** – states that in 2002 Web services had yet to reach their potential. Coffee makes no explicit (or implied/inherent) mention of implementing billing or billing services within Web interfaces. It is not debated, however, that Coffee fails to provide teachings specific to billing and billing systems via Web services.
- **PR Newswire** – provides teachings of Step 9's iCustomer portal. This is a Web portal. Web portals have existed (and continue to exist) that include billing information. A web portal is a user-to-machine GUI interface that integrates content from multiple different Web sources into a single interactive browser container. This is very different from a Web service, which is a machine-to-machine interface. Thus, PR Newswire provides no teachings specific to billing and billing systems via Web services.
- **15 Seconds** – provides generic teachings for building interfaces for .Net Web services. 15 Seconds fails to provide teachings specific to billing and billing systems via Web services.
- **Orenstein** – provides generic teachings about Application Program Interfaces. Orenstein fails to provide teachings specific to billing and billing systems via Web services.

Since each claimed limitation must be taught for a 35 USC 103 rejection to be valid, and since this claimed limitation is not taught by any combination of the references, the 35 USC 103 rejections to claims 1-20 should be withdrawn, which action is respectfully requested.

The Basis Of the 35 USC 103 Rejection to Claims 1-20 is Not Clear

MPEP 2143 states, at its very beginning, that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious,” citing KSR. Further, MPEP 2143.03 emphasizes that each claim limitation must be considered (e.g., modified “all elements” rule).

The above requirements do not appear to be satisfied in the instant rejection. Specifically, Applicants honestly cannot tell how or why their claimed limitations are being rejected over the cited references. The Examiner has failed to map any of the claimed elements to any of the cited references, which is common practice and results in a degree of clarity (satisfying the clear articulation requirement).

To elaborate on why it was difficult to understand the Office Action rejections, the Examiner copied claim 1 in its entirety and explicitly acknowledged (page 5 of the Office Action) that none of these limitations were specifically disclosed by Stelting. The same explicit acknowledgement (after copying the claim) that Stelting failed to disclose any copied limitations was provide for claim 2 (page 8 of the Office Action), claim 4 (page 9 of the Office Action), and claim 3 (page 10 of the Office action). Claim 5 (page 10 of the Office Action) was rejected under the same rationale as claim 4 ????. Then claims 6-20 were rejected under the same rationale as claims 1-5 (page 11 of the Office action). Thus, the Examiner has explicitly stated that his cited references do not disclose the claimed limitations.

After this statement, (for each claim) an elaboration on what some of the cited references did teach is provided. These teachings, however, did not map to any of the claimed limitations in a meaningful way.

Thus, the Applicants are completely confused as to what rationale is being supported against the claimed limitations. For example, what reference combination is being asserted against the claimed limitations of:

“a plurality of object classes, each of said object classes being used to provide said billing service as a Web service that is configured to be invoked by said computing applications in said distributed network”

I know it must not be Stelting since the Examiner explicitly stated Stelting did not disclose this limitation. PR Newswire, Coffee, 15 Seconds, and Orenstein do not appear to provide any teachings regarding this limitation either.

Applicants respectfully request clarification as to how the cited references map to the claimed limitations so that a more meaningful response is possible. (NOTE: this request assumes that a subsequent Office Action is issued, as opposed to an allowance, which is expected).

The References Fail to Teach Each Claimed Limitation – AND - Applicants Challenge Office Notice to Claimed Limitations

Claim 2, 7, 12 include limitations of:

wherein said web service interface is extendable to provide said computing application with a plurality of addition billing functions, and said billing engine is adapted to perform said additional billing functions, wherein said additional billing functions are billing functions other than said plurality of billing functions.

The Examiner fails to state any cited reference to teach this claimed limitation. He simply states that “it would have been obvious” - without proof or citation. Thus, the Examiner has taken Official Notice of this claimed limitation. Applicants challenge this Official Notice (no rationale was even provided for Applicants to elaborate upon) and require the Examiner to provide explicit proof for this claimed teaching.

Since this claimed limitation is not explicitly or implicitly taught by any cited reference, the 35 USC 103 rejection to these claims are improper and should be withdrawn, which action is respectfully requested.

Claim 4, 9, 14 include limitations of:

wherein said billing service is a rating service, and wherein the web service interface defined for said rating service comprises application programming interfaces associated with at least three of the following [[first]] billing functions:

- i. registering billable services;
- ii. obtaining a billing rate package for a billable service;
- iii. subscribing a billable service for a billing account;
- iv. unsubscribing a billable service for a billing account;
- v. obtaining subscribed billable service instances for a billing account; and
- vi. processing billing events.

First, the Examiner incorrectly copied this limitation. The limitation requires (per amendments in the previous reply) that at least three of the follow billing functions exist. The Examiner's copied claims indicated "at least one"

Second, Applicants note that claim 14 is different from claims 4 and 9 – in that all six of the listed limitations are required to exist. This was not addressed or acknowledged by the Examiner in any way.

Next, the Examiner fails to state any cited reference to teach this claimed limitation. He simply states that "it would have been obvious without proof or citation. Thus, the Examiner has taken official notice of this claimed limitation. Applicants challenge this official notice (no rationale was even provided for Applicants to elaborate upon) and require the Examiner to provide explicit proof for this claimed teaching.

Since this claimed limitation is not explicitly or implicitly taught by any cited reference, the 35 USC 103 rejection to these claims are improper and should be withdrawn, which action is respectfully requested.

Claim 5, 10, 15 include limitations of:

wherein said plurality of object classes define three or more of the following objects:

- i. billing accounts;
- ii. billing events;
- iii. billing rate packages;
- iv. billable services;
- v. billing subscriptions; and
- vi. billable service instances.

Applicants note this limitation is different than the claimed limitation of claim 4. The Examiner stated “claim 5 is rejected under the same rationale used to reject claim 4.” This is a non-sensical rejection. Applicants assume the Examiner is taking Office Notice of these claims, which Applicants hereby challenge and require the Examiner to provide a proper reference for this rejection.

Applicants note that this limitation (similar to limitation of claim 4) requires at least three of the listed elements exist.

Since this claimed limitation is not explicitly or implicitly taught by any cited reference, the 35 USC 103 rejection to these claims are improper and should be withdrawn, which action is respectfully requested.

Claim 3, 8, 13 include limitations of:

said billing service is a billing account service, and wherein the web service interface defined for said billing account service comprises application programming interfaces associated with at least one of the following [[first]] billing functions:

- i. creating billing accounts;
- ii. deleting billing accounts;
- iii. creating records of billing events in a billing account;
- iv. setting the status of a billing account;
- v. obtaining the status of a billing account; and
- vi. obtaining an invoice for a billing account.

Applicants note that claim 13 is different from claims 3 and 8 – in that all six of the listed limitations are required to exist. This was not addressed or acknowledged by the Examiner in any way.

Hopkins is cited for this, but explicitly acknowledges that it provides no teachings specific to billing. The Examiner explicitly states Stelting does not disclose these limitations. Applicants assume the Examiner is taking Office Notice of these claims, which Applicants hereby challenge and require the Examiner to provide a proper reference for this rejection.

Since the above claimed limitations is not explicitly or implicitly taught by any cited reference, the 35 USC 103 rejection to these claims are improper and should be withdrawn, which action is respectfully requested.

Claims 17, 18, 19, and 20 include limitations against each of the independent claims (claims 16, 1, 6, and 11), which are not found in claims 1-5.

The only rejection to these claims in the Office action is found on page 11 last paragraph. This rejection states “claims 16-20 are rejected under the same rationale and references used to reject claims 1-5.” This makes no sense. No valid 35 USC 103 rejection has been asserted (or shown) in the Office Action for claims 16-20. Thus, these claims (claims 17-20) are currently in an allowable condition (since an Examiner must at least assert a “valid” rejection or indicate that the claims are allowable, neither of which has occurred in the present Office Action).

As an aside, Applicants note MPEP 706.07(c) states:

“Second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims, nor based on information submitted in an information disclosure statement ...”

From the above, it is clear that not all the claims in the present Office Action have been rejected under any valid grounds (especially noting claims 17-20). Thus, new grounds for these claims must be asserted (or an allowance given). These new grounds will be necessitated by a lack of proper grounds in the present Office Action (and not by any amendments to the claims). Thus, should the Examiner see any merit in the above arguments, a subsequent Office Action to the present reply should not be made final.

Cited References Fail To Teach What Is Being Asserted In The Office Action

Coffee

Is being asserted for disclosing “Object Oriented Programming in Web services in which application feature lists would be determined by users rather than by vendors to create a tailored enterprise application”.

This is not true.

Coffee is actually a 2002 article that states that aspiration teachings of what Web services could provide have not been fulfilled. It specifically cites a 1988 conference in San Diego which included many “visionary” ideas, which would be great if they existed. One of these ideas was for an “object marketplace in which application feature lists would be determined by users rather than vendors.” The articles then go on to state that these aspirational goals have never materialized – to the disappointment of many.

Thus, Coffee teaches away from the cited concept (stating it wasn’t possible or didn’t exist) while acknowledging that it is a grand (but not yet achieved) goal.

The Examiner needs to find some reference showing how to actually achieve the stated goal, as opposed to citing a reference that acknowledges that an aspiration goal was not satisfied (four years after it was announced).

For the above reason, Coffee is an improper reference (at least for the cited teaching) and all 35 USC 103 references based on this reference as applied should be withdrawn (claims 1-20), which action is respectfully requested.

PR Newswire

Cited for teachings of an integration between Granite systems Xpercom system and Step 9’s iCustomer product.

This article describes how the companies announced their intent and an agreement to integrate these two systems. It also stated goals that it hoped to achieve by integrating these two products. At the time of the article (PR Newswire) the integration never occurred. I did a brief search on the internet and could not discover if the integration ever ultimately happened or not – by which I assume it did not (or at least no positive proof exists that the intended integration of two different products occurred).

Applicants note that this type of thing is common, where a press release is made pertaining to a company's goal to produce something (i.e., Vaporware), which never is actually produced. Citations to Vaporware (such as this one) are not proper 35 USC 103 references that prove (or inherently or implicitly teach) anything.

For the above reason, PRWire is an improper reference (at least for the cited teaching) and all 35 USC 103 references based on this reference as applied should be withdrawn (claims 1-20), which action is respectfully requested.

STELTING

Stelting teaches dynamically combining two (or more) services (including non-Web services) to create a custom Web service. In other words, Stelting is teaching that services can be treated like discrete building components (e.g., Lego blocks) that can be combined at will.

From the Office Action, I believe (again, the Office Action is unclear as to how the claims are really being rejected).

Stelting teaches a Web service 762 that utilizes functions provided by other services. Web service 762 uses functions of billing service 742, shipping service 734, and calculator service 754. I don't really know what service 762 is supposed to be – Stelting states that is a “more sophisticated service” (para 0043). This sophisticated service needs to utilize billing, shipping and calculating services. I suppose some type of logistic or inventory management service would do this, as could some other high level (sophisticated) Web services. Regardless, Web service 762 cannot be a billing service 742 (as defined by the claims) since it is a “more sophisticated service” that uses components of the three different services 742, 734, 754.

Since neither Stelting nor any of the other references teach (explicitly or implicitly) a Web service that is a billing service, the 35 USC 103 rejections to claims 1-20 based on Stelting (and other references) should be withdrawn, which action is respectfully requested.

CONCLUSION

Claims have been adjusted and arguments provided to overcome Examiner concerns expressed as 35 USC § 101 and § 112 rejections. Regarding the 35 USC § 103(a) rejections, Applicants have shown how the cited references fail to explicitly or implicitly teach each claimed limitation. The invention as claimed (Claims 1-20) should be in allowable condition. The Applicants request that the Examiner call the undersigned (954-745-0373) if clarification is needed on any matter within this Reply, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

Date: 23 October 2009

/Brian K. Buchheit/
Brian K. Buchheit, Registration No. 52,667
PATENTS ON DEMAND
Customer No. 57736
4581 Weston Road, Suite 345
Weston, FL 33331
Telephone: (954) 745-0373